

Please enter the following as a clean version substitute for the paragraph in the specification at page 11, lines 27 – 29:

As noted above, functions performed by Transmitter Buffer and Processing 234' and Receiver Buffer and Processing 234 depend on the specific xDSL implementation. In the case of host signal processing, where the present invention can be used for great

Please enter the following as a clean version substitute for the paragraph in the specification at page 12, lines 24 – 26:

Receive data lines RX_1 - RX_4 carry digital samples generated by A/D 213 and assembled and transmitted across the link by DSL-A Interface 216; DSL-D interface 233, conversely dis-assembles and passes these samples on for further signal processing.

Please enter the following as a clean version substitute for the paragraph in the specification at page 18, lines 11 - 29:

--Reuse of DSL Link for External Hardware DSL Implementation

As mentioned earlier, the use of DSL Link 220 is most attractive to a host based DSL modem implementation requiring minimal logic inside Digital IC 230. When the CPU in the motherboard is not fast enough, it is desirable to use the DSL Link to connect Digital IC 230 to an external hardware DSL implementation. In this case, another useful aspect of the present invention is illustrated in FIG. 4. As shown, when an external hardware solution for a DSL modem implementation exists, a reasonable interface to use with such implementation is one based on the ATM Utopia I or Utopia II interface. This is because ADSL technology has already been defined to interface with ATM in both T1.413 Issue 2 and ITU-T G.992 standards. In this configuration, DSL Digital IC 230 would be linked through DSL Digital Link 220 to a hardware based xDSL modem in FIG. 2A and 2B, instead of interfacing directly to DSL Analog Modem Circuit 205. In such instance, of course, since most of the signal processing and control functions would be located within the hardware xDSL modem, DSL Digital Controller 230 could be simplified accordingly. The reason this is possible is because the same 10 signal lines described above (RX₁ - RX₄, TX₁ - TX₄, CLOCK and WORD CLOCK) can serve a dual purpose and act as an ATM interface as well. As above, for the same four sampling cycles per word clock, the following data can be transported over DSL digital link 220:

1. First clock cycle period: RX₁ - RX₄ are used for Control, 0, RxClav, TxClav;